VERIFICATION TEAM REPORT

Computer Studies 3/13/06

A. Computer Studies Program Review
   1. Program Evaluation and Planning Team Members: David Angelovich, Jeff Omodt
   2. Verification Team Members: Loi Nguyen, Linda Schoppert, Lynda Mongcr, Kate Benscoter, Sonia Wright

B. Statement of Completion
   The Computer Studies Program Evaluation Report is complete. Some editing changes will be submitted to the Verification Team.

C. Strengths of the Program
   1. New course offerings are created and delivered nearly every semester.
   2. Responds well to business and student needs in a timely manner.
   4. Up to date computer equipment for training students.
   5. Retention rate is higher than the college average.
   6. Close monitoring of student progress by faculty allows for intervention to prevent student failure.

D. Areas for Program Improvement
   1. Create a long term plan for equipment replacement.
   2. Computer Information Systems Applications (CISA) program review belongs to Computer Studies, not in Office Skills.
   3. Explore offering online courses.
   4. Plan for the eventual need to create an exclusive-use classroom with special equipment to facilitate teaching more complex subjects.

E. Summary of Verification Team Recommendations
   The program has adjusted to the current employment downturn through creative consolidation of classes. Despite the downturn the program has responded with new course offerings nearly every semester. Even though they have lost one full-time faculty member the student needs are still being met. To keep current with technology, a long term equipment replacement plan should be implemented.
1. MISSION
   A. Program Mission Statement

   The Computer Studies program provides students with both a theoretical and a practical
   foundation to pursue a career in the areas of computer science, computer applications
   and/or computer networking. The program can result in a certificate of proficiency in a
   computer specialty, an AS degree, or a transfer foundation for continued study in
   Computer Science, Business, Economics or other disciplines where strong grounding
   computer skills is essential to success.

   Updated courses and new offerings are constantly added to assure that the program
   remains current and relevant to a rapidly changing technological landscape. Courses are
   designed to also serve the local business community with skills upgrade opportunities for
   returning students of all levels regardless of previous education. A close relationship with
   the business community is maintained which helps assure that students can be guided
   to employment opportunities as they develop.

   B. The program falls within one or more of the following categories (check all that apply):
      - Transfer/Degree
      - Vocational
      - Remediation
      - Non-Credit/Community Services

2. CURRICULUM AND INSTRUCTION
   A. Review the course outline data and assess the following:

   - Currency of course outlines. Course outlines must be reviewed every five years. If all
     course outlines have not been reviewed, include a timeline for review in your unit
     plans.

   Course outlines have all been reviewed within the last five years and are kept current
   with updates via WebCMS and the Curriculum committee. Several of the WebCMS
   records do not reflect the most current revision dates. A complete review to bring the
   WebCMS data up-to-date will be completed Spring Semester 2006.

   - Appropriateness of courses to the program.

   Courses are under constant review and reevaluation. All are current and appropriate
   to the program

   - Appropriateness of current pre- and co-requisites and recommended preparation.

   None of the Computer Studies courses have pre- or co-requisites. Recommended
   preparation requirements are current and appropriate.
- Appropriateness of the degree and certificate requirements.

Certificate requirements have been recently updated. Degree requirements will be reviewed again within the next two years.

B. Review the Student Learning Outcomes Program Map and assess the following:

- Complete the SLO Matrix (attached).

- What timeline have you established for developing course-level student learning outcomes?

  Course level SLO documents have not yet been developed. Work on these will begin in Spring 2006 Semester and continue until completed.

- Once established, in what ways will students in your program demonstrate achievement of stated learning outcomes? Check all that apply:
  
  - Student internships
  - Complete program competency exams
  - Assessment by departmental rubric
  - Obtain jobs in the field
  - Pass state/national examinations
  - Success in a subsequent course sequence
  - Performance after transfer
  - Portfolios/capstone projects
  - Other Successful completion of industry standard certification exams

- Discuss the methods used (above) to assess whether the students achieved the stated student learning outcomes. What was the success rate?

  This is still in the early stages of development and will be expanded as course-level SLO’s are developed.

- For those students who did not achieve the SLOs, what interventions were used to support those students? What programmatic changes will be made to ensure future SLO achievement?

  Current proactive monitoring and intervention will continue. Programmatic change as needed will be evaluated and implemented after more SLO detail data is developed.

- An accreditation standard requires that the institution makes public expected learning outcomes for its degree and certificate programs. In what ways are the program’s expected learning outcomes made public? Check all that apply:
  
  - Syllabi
  - Catalog
  - Brochure
  - Articulation/Transfer agreements
  - Website
  - Other ______________________________
C. Describe how your program ensures that the syllabi for each instructor are congruent with the course outline. Describe what measures are taken if any syllabi are incongruent with the course outline.

The program coordinator reviews syllabi from each instructor before the start of each semester and recommends apt adjustments to ensure consistency and congruence.

D. What methods are used by the program to ensure that similar standards of academic rigor of the course outline of record are followed by all instructors in the discipline?

Instructors all use the same text and course outlines for a particular course. The program coordinator and division chair review each class to ensure that consistent academic rigor and content are maintained.

E. What instructional methods are used by the program faculty to address the diverse student population and to encourage retention and persistence of the program’s students?

The program attracts a diverse range of students from a variety of ethnic and cultural backgrounds. Close monitoring of student’s progress allows intervention to act before the student is too far behind to recover. Retention and persistence are very high.

F. What instructional methods are used by the program faculty to address the differences in learning styles and to encourage retention and persistence of the program’s students?

Each of the instructors is encouraged to offer course materials in as many different presentation styles and formats as possible, with a goal of attaining student success regardless of their learning style or experience.

G. Review existing articulation agreements with high schools and other colleges. Are they adequate? Current? Effective? If not, what changes will be made?

Articulation agreements are constantly being updated and reviewed. With the assistance of the Vocational Dean and the Articulation Officer, many meetings are held each semester to keep an open dialogue with our counterparts at other institutions.

H. Reflect on your responses in Section 2, Curriculum and Instruction, and write objectives for improvement on Schedule A, Unit Plan, as needed.

3. **Student Success and Equity**

A. Review the data on enrollment, retention, and successful course completion (and grade distribution to be phased in). Discuss program trends relative to college-wide trends. Identify areas where disparity exists for any demographic group (ethnicity/race, gender, age, disability).

Data sample size is relatively small, making trends difficult to discern. Retention rates seem to be significantly above the college-wide average. Program performance vs. overall college wide-trends will be studied further during the Spring 2005 Semester.

B. Identify strategies used to identify and assist students at risk. Discuss their effectiveness.

Student assessment is designed to give and early warning of “at risk” situations. Early intervention has resulted in very high retention rates and persistence in this group.
C. What has the program done to formalize links with support services for students?

As both a vocational and academic program, careful attention is paid to ensuring that student avail themselves of the many support services offered. Syllabi include references to aid the students in finding the right support for a particular issue. Presentations are made periodically to ensure that counselors have up-to-date and correct information about the program and course offerings.

D. Review the full-time/part-time instructor ratio (to be phased in). Discuss trends, and needs.

Data is too limited to discern trends or assess needs.

E. Review the data on degree/certificate completion and any job placement data available. Assess the effectiveness of your program. (vocational programs only)

Data is not sufficient to assess effectiveness at this time.

F. Reflect on your responses in Section 3 Student Success and Equity and write objectives for improvement on Schedule A, Unit Plan, as needed.

4. **Enrollment Trends and Student Satisfaction**

A. Review the enrollment trends data, and describe recent trends. Are there external factors such as community demographics or the economy that have affected the program? What are the plans to address these factors?

Enrollment has fallen in the past 3 years across the program. Particularly hard hit was the Networking Technology Certificate program. The single factor cited over and over is the lack of jobs in the technology business sector. Figures cite 450,000 tech jobs lost permanently in Silicon Valley from 2000 to 2004. Cost-cutting measures in the area of technical support staffs have outsourced as many as 1.2 million jobs overseas in the last 5 years. Since 2001, four-year colleges and universities have reported 40-60% declines in the number of Computer Science majors enrolled in their programs. The vocational component of our program cannot be successful if there is not a constant source of jobs in which to place the new graduates. Effectively, the program is on hold until new job creation returns to the technology sector of the economy.

B. Review the load (WSCH/FTEF), productivity (FTES/FTEF), average class size, and financial data and describe recent trends.

As described above, demand for classes has fallen dramatically over the last three years. Much of the shortfall has been made up by offering fewer sections and less frequent repetition of classes. Some full-time faculty have been reassigned to courses in other areas. The most senior member of the Computer Studies Program has recently been teaching as much as 80% of his load in the Math department. And the Computer Studies Program Coordinator has taught as much as 80-100% in Accounting in recent semesters. This has allowed reasonable WSCH/FTEF productivity to be maintained and has helped retain a portion of the valuable, experienced pool of part-time instructors.

C. Review the schedule of classes for the program and the results of the student satisfaction surveys, and discuss whether the course offerings are scheduled appropriately to meet student need.
Student satisfaction remains high, although some disappointment is expressed at the reduced course offerings and the failure of some classes to go forward when enrollments are near but not meeting the 15 minimum class enrollment target.

D. Discuss the results of the student satisfaction survey, identifying areas for improvement and continued success.

Student satisfaction is rated very high in most areas, except when noting the lack of job opportunities following program completion.

E. What documented labor market demand does this program address? Does the program offer unique training (and not represent unnecessary duplication of manpower training) in the area? (vocational programs only)

Computer applications and network expertise is a widely sought after skill-set in almost every sector of the job market. As noted above, the market for specialists is very weak, but students are very successful in an emerging hybrid style job in which the computer skills are a portion of their responsibilities.

F. Reflect on your responses to Section 4 Enrollment Trends and Student Satisfaction, and write objectives for improvement on Schedule A, Unit Plan, as needed.

5. **Community Outreach**

A. What recruitment and/or community outreach activities has the program engaged in or initiated?

The Program benefits directly from a close relationship with the businesses and employers of our community. Many of the students are already employed in the community and become the hiring authorities to bring in other students into entry-level positions and internships. The graduates of the program are highly regarded and sought after for their expertise and experience. A skills database is maintained within the program which helps to match current and formers students to opportunities as they become available.

Our transfer students have done well at their transfer institutions, notably CSU Sacramento, CSU Sonoma, UC Berkeley, and UC Davis.

A. What has the program done to establish relationships with secondary schools and/or four-year institutions?

With the assistance of the vocational programs dean we meet regularly with high schools maintaining an ongoing dialog as our programs evolve. Issues of articulation and course sequencing are regularly reviewed. Several courses have been offered at New Technology High School, and students are given a head start as they transition into a course of study in Computer Studies at Napa Valley College.

B. What has the program done to establish relationships with the business community (if a vocational program)?

A large percentage of students are already employed and active in the community. As they return to the college to update their skills or prepare for a career change, they bring with them a practical basis from their day-to-day work experience. In addition, many of these students are also the “Hiring Authorities” for entry level jobs and internships.
C. How has the involvement of the advisory committee helped in improving and/or promoting the program? (vocational programs only)

The CS Advisory Committee has provided support and direction in insuring that the program evolves and update as the needs of the community and technology change. With their assistance, new and revised course offerings are presented nearly every semester.

D. Reflect on your responses in Section 5 Community Outreach and Articulation and write objectives for improvement on Schedule A, Unit Plan, as needed.

6. **ACCREDITATION AND EXTERNAL REVIEWS**

A. Review the Accreditation Self-Study Planning Agenda, Accreditation Final Report, and results of previous program evaluations that are included in the attached data. Discuss the recommendations of the review teams relevant to the program and how the program responded.

   Not applicable

B. Indicate the sources of information used in Question 6A.

   - Accreditation Self-Study Planning Agenda
   - Accreditation Final Report
   - Previous program evaluation recommendations

C. Review the recommendations from any other licensing or accreditation bodies. Discuss the recommendations of the review teams relevant to the program and how the program responded.

D. Reflect on your responses in Section 6 Accreditation and External Reviews and write objectives for improvement on Schedule A, Unit Plan, as needed.

7. **RESOURCES**

The results of program evaluation feed into the planning and budget process. Consider the staffing and financial data provided, as well as the Unit Plan forms you completed during this evaluation, while answering the questions in this section. Requests must be linked to the 2005-2011 NVC Strategic Plan Goals and Objectives.

A. **Staffing**

   Summarize the staffing resource needs identified in the unit plans. Discuss any changes needed. (Complete Schedule B, Staffing, as needed)

   Because of the current downturn in the technology market economy, combined with faculty reassignments and planned retirement among full-time faculty, no staffing plans can be made with any precision at this time.

B. **Program-Specific Equipment**

   Discuss the strengths and weaknesses of the program-specific equipment available to enhance program success. What needs remain? What strategies are planned to meet those needs? (Complete Schedule C, Program-Specific Equipment Request, as needed.)
Computer studies require access for students to laboratories with current hardware and software. In addition, network studies require the capability to isolate the lab from the campus network at certain times. Current equipment is adequate. Upgrade and replacement should be anticipated on the three-four year time cycle.

C. Facilities Improvement/Renovation

Discuss the strengths and weaknesses of the physical resources available to enhance program success. What needs remain? What strategies are planned to meet those needs? (Complete Schedule D, Building Improvement/Renovation, as needed.)

We have used creative methods for multiuse classrooms, so they function for a variety of computer subjects. At some point in the not-too-distant future, we will not be able to multitask some of the more complex subjects and will need one or more exclusive-use classrooms with special equipment.

D. Technology

Discuss the strengths and weaknesses of the technology available to enhance program success. What needs remain? What strategies are planned to meet those needs? (Complete Schedule E, Request for Technology, as needed.)

The technology described above in items B and C are adequate for program success at this time.

E. Professional Development

1) Using the results of the Faculty/Staff Accomplishments survey, summarize the professional development activities undertaken by faculty and staff.

2) Based on the goals that resulted from this program evaluation, complete Schedule F, Professional Development Needs, to indicate what areas of focus have been identified for future faculty/staff development. Note: Budget requests for Travel and Conference should be addressed or requested in the question 7G.

F. Learning Resources

What learning resources (e.g., books, periodicals, videos) are needed to enhance program success? (Complete Schedule G, Learning Resources Needs, as needed.)

G. Operational Budget

Are operational funds appropriate to enhance program success? If not, how would additional operational funds be used to enhance program success? (Complete Schedule H, Request for Budget Augmentation, as needed.)
**PROGRAM EVALUATION SUMMARY FOR COMPUTER STUDIES**

Complete the following sections based on the program evaluation completed. This summary will be forwarded to the Planning Committee after the verification phase is complete.

**Program Achievements** (major achievements, changes, implementations, progress since last program review)

Previous program review data was not available for comparison.

**Strengths** (unique characteristics, special capacities)

The program has changed and adapted rapidly to changes in the student population and business sectors. New course offering are created and delivered nearly every semester. The program has adjusted appropriately to the current economic slump.

**Challenges** (concerns, difficulties, areas for improvement)

Lack of job placements and the current downturn in the technology sector of the market are placing severe pressures on the program. Alternative content and delivery should be investigated and supported.

**Optional:** What additional data, if any, would have been helpful to effectively evaluate the program?

Prior program review documents would have been helpful.

A longer time frame of sample data would have reflected the program in both up and down economies.

Timely delivery of the statistical data would have allowed time for a more thorough and thoughtful analysis

CISA program review belongs in Computer Studies, not in Office Skills as is currently proposed.

Support of Professor Richard Thomson Bremer was pivotal in achieving any outcome from this process at all. He should receive the highest recognition for his efforts and be accorded reassigned time more commensurate with the effort he expended. (a threefold increase is in order, at least).

Future program reviews should include reassigned time for the program coordinators too. This workload is far beyond any reasonable expectation for a coordinator to accomplish while keeping their regular responsibilities up to date as well.
The program evaluation report is reviewed by the program faculty or staff, signed by the program evaluation chair and division chair or supervisor, and forwarded to the Office of Research, Planning, and Development by _________________, for the verification phase.

Program Evaluation Chair Signature: ______________________________
Division Chair/Supervisor Signature: ______________________________
Date: ______________________________

**VERIFICATION PHASE**

The verification team will review the Program Evaluation Report for accuracy and completeness, and the process used to develop the report (see verification team duties). The program evaluation will be verified by _______________________. Once the report is verified and shared with the PEP team, will be forwarded to the appropriate Vice President or President (for administrative services) by _______________________.

Verified on: ______________________________
Verification Committee Signatures: ______________________________

**ACKNOWLEDGEMENT PHASE**

The Vice President (or President for administrative services) will read and acknowledge the program and planning document and send a letter to the program team and discipline/program faculty or staff, with copies to the Academic Senate President, the Planning Committee, and the President of the college (who will forward them to the Board of Trustees). The vice presidents and/or President will use program review results to 1) base discussions and decision making on data and evaluation provided by program evaluation; 2) inform program planning; and (3) advocate for program needs.

Vice President/President ______________________________
Date Letter Sent: ______________________________
Recommend review in 2 years: Yes _____ No _____
## PROGRAM EVALUATION AND PLANNING

### STUDENT LEARNING OUTCOME (SLO) MATRIX

#### COMPUTER STUDIES

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# PROGRAM EVALUATION AND PLANNING

## STUDENT LEARNING OUTCOME (SLO) MATRIX

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<td>Students demonstrate an understanding of basic computer concepts and ability to utilize a computer, equipment and software.</td>
<td>Students will acquire and apply personal strengths and skills necessary to succeed in the work place.</td>
<td>Students will acquire technical skills to setup, maintain, and troubleshoot a network.</td>
<td>Students will acquire skills to access internet/online resources for research and problem solving.</td>
<td>Students will acquire skills to select, install, upgrade, and maintain computer hardware and peripherals.</td>
<td>Students will demonstrate proficiency in the use of software applications to solve business problems.</td>
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